

REMARKS

Favorable reconsideration and allowance of the present application are respectfully requested in view of the foregoing amendments and the following remarks.

As an initial matter, Applicants wish to express their gratitude to Examiner Rhee for the courtesy and assistance she provided during the recent personal interview on April 6, 2005. During the interview, Applicants explained the distinctions between the claims and the primary references cited, and also presented data that further exemplified such distinctions.

Currently, claims 41-74 and 77-99, including independent claims 41, 57, 63, 71, 77, and 91, remain pending in the present application. In the Office Action, independent claims 77 and 91 were rejected under 35 U.S.C. §103(a) as being obvious over Gaylord, Jr. in view of Obayashi, et al., the “eFunda” reference, the “Encyclopedia of Petroleum Products” reference, and/or the “Lumicor” reference. As correctly noted by the Examiner, Gaylord, Jr. fails to disclose one or more limitations of independent claims 77 and 91, such as a *first thermoplastic material having a first melting point and second thermoplastic material having a second melting point, wherein the second melting point is higher than the first melting point.*

Nevertheless, the Office Action combined Gaylord, Jr. with Obayashi, et al., the “eFunda” reference, the “Encyclopedia of Petroleum Products” reference, and/or the “Lumicor” reference in an attempt to render obvious independent claims 77 and 91. As an initial matter, Applicants respectfully submit that there would have been no motivation or suggestion for one of ordinary skill in the art to combine the teachings of any of these five references and arrive at the limitations of independent claims 77 and

91. In fact, it appears that the only incentive or motivation for combining any of these five references stems from the use of Applicants' disclosure as a blueprint to reconstruct the claimed invention out of isolated teachings in the prior art, which is improper under 35 U.S.C. § 103.

Even assuming that the references are somehow combinable, however, the resulting combination would still fail to disclose each limitation of independent claims 77 and 91. For example, the Office Action asserts that Obayashi, et al. teaches a second thermoplastic material in which "the second melting point of the second thermoplastic material is higher than the first melting point of the first thermoplastic material." Quite to the contrary, all of the Examples of Obayashi, et al. use a bonding tape made of a *single* polymeric material having a *single* melting point (i.e., polyethylene terephthalate bonding tape in Examples 1 and 2, polyvinyl chloride bonding tape in Example 3, and nylon 12 bonding tape or film in Example 4). (Cols. 5-7).

The only conceivable "second material" of Obayashi, et al. is an *adhesive coating*, such as an acrylic resin, epoxy resin, or petroleum resin. (Col 5, II. 34-50). However, the adhesive coating is *not* part of the bonding tape and is only applied to help in the "interposing operation"—the *placement* of a piece of bonding tape between superposed fabric end portions—not in the later "welding operation." As further evidence that the adhesive coating does not form a portion of the bonding tape, Obayashi, et al. actually indicates that the adhesive coating *decreases* the welding effect of the bonding tape. (Col 5, II. 34-50). Thus, the adhesive coating of Obayashi, et al. simply does not form at least a portion of a continuous tape as required by independent claims 77 and 91. For at least these reasons, Applicants respectfully

submit that independent claims 77 and 91 patentably define over the cited references, taken singularly or in any proper combination.

In the Office Action, independent claims 41, 57, 63, and 71 were also rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,970,079 to Gaylord, Jr., which is directed to a body support binder formed from serially arranged fabric panels whose ends are interconnected by strips of plastic material. Gaylord, Jr. describes the joining of “segments” of thin plastic film, i.e., *to each other*. However, Gaylord, Jr. does not teach or in any way suggest that its strips of plastic material are capable of *both adhesively and physically bonding* to the serially arranged panels of its thoracic support binder as required by independent claims 41, 57, 63, and 71. Similarly, when the fabric panels of Gaylord, Jr.’s thoracic support binder are joined, no teaching or suggestion exists that the panels are joined by a seam formed by bonding a continuous thermoplastic tape to the upper and lower surfaces of two substrates, *where that bonding includes a combination of both adhesive bonding and physical bonding*. For at least these reasons, Applicants respectfully submit that independent claims 41, 57, 63, and 71 patentably define over Gaylord, Jr..

Various dependent claims were rejected in the Office Action under either 35 U.S.C. § 102(b) and/ 35 U.S.C. § 103(a). For at least the reasons indicated above relating to corresponding independent claims 41, 57, 63, 71, 77, and 91, Applicants respectfully submit that the respective dependent claims patentably define over the cited references. However, the patentability of the dependent claims does not necessarily hinge on the patentability of independent claims 41, 57, 63, 71, 77, and 91.

as some or all of dependent claims may possess features that are independently patentable.

It is believed that the present application is in complete condition for allowance and favorable action, therefore, is respectfully requested. Examiner Rhee is invited and encouraged to telephone the undersigned, however, should any issues remain after consideration of this response.

Please charge any additional fees required by this response to Deposit Account No. 04-1403.

Respectfully requested,
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